## PHS CHRONICLES

PHS Chronicles presents short articles about significant happenings in the nearly 200-year history of the Public Health Service. The Office of the PHS Historian oversees preparation of the Chronicles. Contributions of less than 1,500 words are welcomed. Contact John Parascandola, PhD, PHS Historian, 17-31 Parklawn Bldg., 5600 Fishers Lane, Rockville, MD 20857, tel. 301-443-5363, FAX 301-443-0358 (E mail jparasca@oash.ssw.dhhs.gov).

## The First Edition of 'The Ship's Medicine Chest' (1881)

In 1881, the Marine Hospital Service, forerunner of the Public Health Service (PHS), published a 45-page work entitled "Handbook for the Ship's Medicine Chest." This volume serves to remind us of the maritime roots of the Service.



John B. Hamilton was Supervising Surgeon General of the Marine Hospital Service in 1881 when the "Handbook for the Ship's Medicine Chest" was first published.

The Marine Hospital Service was established by the Federal Government in 1798 to provide medical care to sick and disabled American merchant seamen. The first permanent Marine Hospital was authorized on May 3, 1802, to be built in Boston. The Service was just a loosely knit group of hospitals for merchant seamen until 1870, when it

was reorganized and the administration of the hospitals centralized in Washington, DC.

A Supervising Surgeon, John Maynard Woodworth, was appointed to head the Service in 1871. His title was changed to Supervising Surgeon General (later Surgeon General) in 1875. Under Woodworth, the Marine Hospital Service began its transformation into the disciplined and broad-based Public Health Service (the name it received in 1912) of the future. Woodworth adopted a military model and put his physician "officers" in uniform. In 1889, the Service's Commissioned Corps was formally established by law.

Even before the establishment of the Marine Hospital Service, Federal legislation had been enacted in 1790 that required every American flag vessel of more than 150 tons with a crew of 10 or more to carry a medicine chest. Since merchant ships typically did not carry a physician, there was obviously a need to provide some kind of basic medical instruction for the seamen that went beyond the simple directions that frequently accompanied medicine chests.

Although there was no Government-issued manual for this purpose for almost a century after the passage of the 1790 law, merchant seamen could consult works published by private physicians, such as Joseph Bond's "The Master-Mariners Guide in the Management of His Ship's Company, with Respect to Their Health, Being Designed to Accompany a Ship's Medicine Chest," published in Boston in 1847. Bond explained his reasons for preparing his book as follows:

My apology for the undertaking is, that in the medicine-chests for the use of the vessels belonging to our posts, I have never seen books of directions that are suitable. This little work is to supply the deficiency which must have been felt by every shipmaster, having no other guide in the management of disease than the small book of directions usually accompanying medicine chests.

In 1881, the Marine Hospital Service decided to issue its own medical manual, "Handbook for the Ship's Medicine Chest," produced in Washington, DC. In the preface, Supervising Surgeon General John B. Hamilton explained the purpose of the handbook as follows:

This book is issued only to vessels subject to the payment of hospital dues, and is intended to be one to which the master or other officer in charge of a vessel may refer for information upon the occasion of an injury to any of the crew or the appearance of sickness among them, to aid in obtaining a knowledge of the act of preventing disease, to give the necessary information as to the means of obtaining hospital or dispensary relief, and to serve as a guide to the proper use of the medicine chest required by law to be kept on board.

The book was divided into several sections. It began with a brief discussion of disease prevention, followed by a list of all of the medicines and supplies that should be in the ship's medicine chest. The longest portion of the book was a discussion of various accidents and illnesses and how to treat them. Also included in the work was information on the ports where Marine Hospital Service or contract physicians were available to treat seamen. Finally, an appendix provided information on the nature and purposes of the Marine Hospital Service and the laws relating to it.

Examples of items to be carried in the medicine chest are adhesive plaster, bandages, castor oil, calomel, chloroform liniment, fluid extract of ginger, opium, quinine, saltpetre, salicylic acid, sodium bicarbonate, surgeon's needles, and a tooth forceps. The ship's master was admonished to inspect the medicine chest carefully before starting out to sea to be sure that it was furnished with all of the items on the list.

The many injuries and diseases discussed included fractures, dislocations, malarial fevers, dysentery, yellow fever, cholera, scurvy, syphilis, delirium tremens, and smallpox. Resuscitation after near drowning also received attention.

The handbook's directions concerning yellow fever reflect the treatment regimen followed in 1881. The care giver is instructed to begin treatment with senna tea as a laxative. If the skin is very dry, the legs should be rubbed with mustard water. If the patient is vomiting, a nitre mixture (consisting of saltpetre, water, and an alcoholic solution of ethyl nitrite should be given. If the fever is not high, quinine should also be administered.

The handbook describes three cardinal rules to observe in treating yellow fever. First, insure that the patient gets sufficient rest by giving Dover's powder (which contained opium) and inducing the patient to remain in bed. Second, insure free action of the skin by warm baths and sweating medicines. Third, strengthen the patient by means of weak whiskey and water, beef tea, quinine, and other stimulants. The patient should not be given any solid food until after convalescence.

The handbook proved to be so useful that new editions of it have been issued periodically over the course of the 20th century. In 1981, just 100 years after the first edition was published, the entitlement of merchant seamen to health care by PHS was ended. Although PHS is no longer

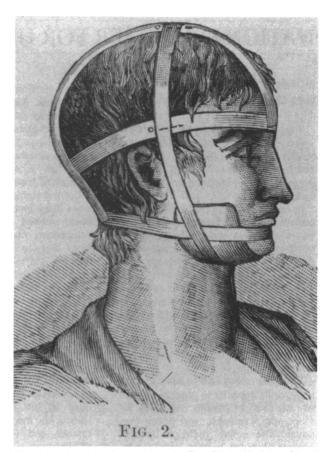


Illustration from the first edition of "The Ship's Medicine Chest" showing the proper bandaging for a fractured jaw.



The 1881 edition of the "Ship's Medicine Chest" (right) and a later edition of the work.

responsible for the health of merchant seamen, it has continued to take a leadership role in the publication of "The Ship's Medicine Chest." The book was last issued in 1984 under the title, "The Ship's Medicine Chest and Medical Aid at Sea," and a new edition is currently in preparation.

-JOHN PARASCANDOLA, PhD, PHS Historian.